

THE LUNAR OBSERVER

A MONTHLY NEWSLETTER FOR STUDENTS OF THE MOON
EDITED BY: BILL DEMBOWSKI 219 OLD BEDFORD PIKE WINDBER, PA 15963

JUNE 1998
DEMBOW@TWD.NET

FEATURE OF THE MONTH

Wallace - (20.3°N - 8.7°W)



Sketch by Robert H. Hays, Jr. - Worth, Illinois

150mm Reflector - 170X - Seeing 6 to 7

On the southeast quadrant of Mare Imbrium, just northeast of Eratosthenes lies the flooded crater Wallace. Wallace is about 26 km in diameter and has discontinuous walls, the highest section being to the south and rising about 540 meters above its surroundings.

On March 7, 1998, Robert H. Hays, Jr. sketched Wallace and submitted the following report:

"On the evening of March 6/7, 1998, I timed four occultations in two hours of clear sky. I also noticed the crater Wallace somewhat isolated in southeast Mare Imbrium and decided to sketch it. This is a squarish feature with a broken rim. The longest portion of rim extended from the southeast end clockwise around to the north end. The highest points were to the south and northwest, judging from the shadows that I saw. A modest curved portion of rim was to the northeast, and a very small, low rim was in a large gap to the east. I saw nothing in the interior of Wallace. Just south of Wallace, however, was what looked like a small, much elongated crater. The two normal modest craters farther to the south are Eratosthenes A and B, while two more small pits are to the north and west of Wallace. There were a few, ill-defined wrinkles. A bright, gently curved area was noted west of Wallace, giving the impression of a slope facing the sun. Overall, though, this looked like a very smooth bit of maria."

Thanks to Robert for another fine sketch and report. Wallace can be found on Map #21 of Rukl's Atlas of the Moon and should be in good position for viewing approximately eight days after new moon.

Enjoying the Sunset in Walter

By Rogan Roth - Astronomical Society of South Africa

Turning your binoculars or telescope on the Moon during the waxing and waning phases can be a very rewarding experience. Details on the terminator (sunset/sunrise line) are often considerably enhanced by the low sun angle and mountains, valleys and craters stand out in fascinating detail. This is also a good time to look for interesting lighting effects created by unusual geometry and fortuitous alignments of lunar topography. Who has not marveled at the gigantic shadows cast across the Mare Imbrium by the huge solitary peaks of Pico and Piton? The Straight Wall and the Alpine Valley are two more remarkable features not to be missed.

The Moon has such a profound effect on our daily lives (especially when it intrudes on our viewing sessions!) that we often take it for granted and consider it a nuisance. However, cruising lunar landscape with any optical instrument at your disposal becomes a flight of fancy powered by the muscles of the eye - no cumbersome pressure suit or sophisticated spacecraft needed here! As it so happens the huge, venerable crater Walter displays quite remarkable shadow effects as the low angle of the sun shines across its rugged features. Ancient cosmic and geological forces must have torn a great rift in the western wall which allows the last rays of the setting sun to flood into the darkened interior, illuminating the central peak and casting long, dark shadows across the latter half of the crater floor and over the eastern wall, still in bright sunshine.

One can only imagine what it must be like standing on the rugged rim of Walter amidst breathtaking, alien scenery watching these dramatic events unfolding silently on the airless world that is the Moon, the Earth's only natural satellite. A similar spectacle (this time at lunar sunrise) has been noted in the nearby crater Hesiodus (See "The Sunrise Ray in Hesiodus", Sky & Telescope, July 1996, 74-76). Enjoying the sunset in Walter is just a matter of timing - the shadow effects described above are only visible when the lunar phase is approximately 0.556 (around 3rd quarter). It would be prudent to view the Moon a day or two before and after 3rd quarter to be sure not to miss this interesting phenomenon. You will need a map of the Moon to find Walter, a telescope of modest aperture with a medium-powered eyepiece (say 100X) and a strong resolve to get out of bed in the early hours of the morning!

So now that you have solemnly pledged to return to the Moon occasionally and marvel at the wonders of our nearest celestial neighbor be sure to spare on last "Heylookatthat!" for the Sunset in Walter.

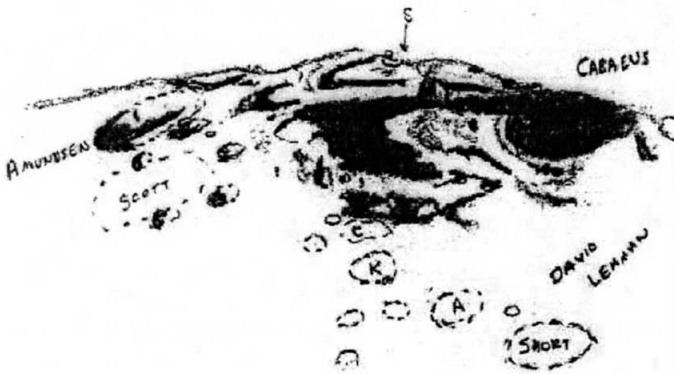
Observations Received During The Month:

Francis G. Graham.....	East Pittsburgh, Pennsylvania....	Three photographs of February, 1998 eclipse
Robert H. Hays, Jr.....	Worth, Illinois.....	Sketch of Wallace
		Sketch of Kies Pi and vicinity
		Sketch of Piton and vicinity
Doug Hansen.....	San Diego, California.....	CCD image of Mare Nectaris
David J. Lehman.....	Fresno, California.....	Sketch of Atlas
Rogan Roth.....	South Africa.....	Written account of sunset in Walter

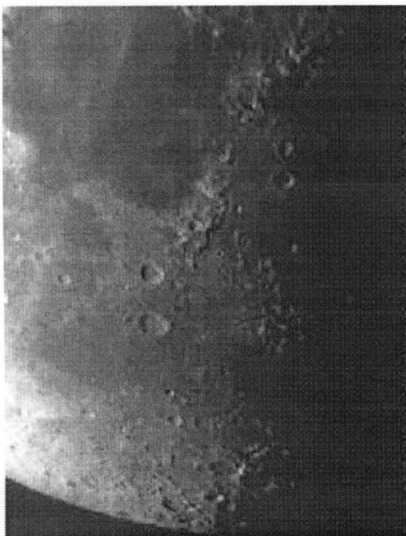
Lunar Calendar for June 1998 (UT)

2.....	01:44.....	First Quarter
4.....	23:44.....	Moon at Apogee (404,914 km)
10.....	04:19.....	Full Moon
14.....	08:00.....	Moon 3 Degrees North of Uranus
17.....	10:38.....	Last Quarter
17.....	11:00.....	Moon 0.8 Degrees South of Jupiter
20.....	17:00.....	Moon at Perigee (366,582 km)
24.....	03:51.....	New Moon (Start of Lunation 934)

Topographical Studies:



South Polar Region
Sketch by David Lehman
Fresno, California
10" Reflector - 154X
Sept. 5, 1995



Southern Terminator - 1st Qtr.
Photograph by Tom Ferrell
Lilburn, Georgia
8 inch SCT
Tri-X Film - 1/2 sec.
June 30, 1990